



RW

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

Figdor et al.

**Serial No.:** 10/808,681

**Filed:** March 25, 2004

**For:** MELANOMA ASSOCIATED  
PEPTIDE ANALOGUES AND VACCINES  
AGAINST MELANOMA

**Confirmation No.:** 6537

**Examiner:** To be assigned

**Group Art Unit:** 1642

**Attorney Docket No.:** 2578-4230.1US

CERTIFICATE OF MAILING

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1/20/06  
Date

Betty Vowles  
Signature

Betty Vowles  
Name (Type/Print)

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08 be considered by the Examiner and made of record. Copies of foreign patent documents and non-patent literature are enclosed pursuant to 37 C.F.R. § 1.98(a)(2).

Other Documents

Notice of Opposition to a European Patent for Patent No. EP0668350, date of mention of the grant in the European Patent Bulletin July 28, 2004.

Opposition of EP0668350 in the name of Crucell Holland B.V. for Opponent Oxxon Therapetuics Limited.

ADEMA et al., Melanocyte Lineage-Specific Antigens Recognized by Monoclonal Antibodies NKI-beteb, HMB-50, and HMB-45 are Encoded by a Single cDNA, American Journal of Pathology, December 1993, pp. 1579-85, Vol. 143, No. 6.

VOGEL, EMBL Accession No. M32295

KWON et al., a melanocyte-specific gene, Pmel 17, maps near the silver coat color locus on mouse chromosome 10 and is in a syntenic region on human chromosome 12, Proc. Natl. Acad. Sci, October 1991, pp. 9228-32, Vol. 88, USA.

ADEMA et al., T Cell Stimulatory Tumor Antigens, Keystone Symposium, 1993, J. Cell Biochem, supplement 17, part D, p. 107.

SHILYANSKY et al., T-cell receptor usage by melanoma-specific clonal and highly oligoclonal tumor-infiltrating lymphocyte lines, Proc. Natl. Acad. Sci., March 1994, pp. 2829-33, Vol. 91.

STORKUS et al., Identification of Human Melanoma Peptides Recognized by Class I Restricted Tumor Infiltrating T Lymphocytes, The Journal of Immunology, October 1, 1993, pp. 3719-27, Vol. 151, No. 7, USA.

O'NEIL et al., Detection of Shared MHC-Restricted Human Melanoma Antigens after Vaccinia Virus-Mediated Transduction of Genes Coding for HLA, August 1, 1993, pp. 1410-18, Vol. 151, USA.

KAWAKAMI et al., T-Cell Recognition of Human Melanoma Antigens, Journal of Immunotherapy, 1993, pp. 88-93, Vol. 14, Raven Press, Ltd., New York.

MILES et al., HiTech... Multiple Peptide Synthesis (Pepscan Method) for the Systematic Analysis of B- and T-cell Epitopes: Application to Parasite Proteins, Parasitology Today, 1989, Vol. 5, No. 12.

ARNHOLDT et al., Analysis and Partial Epitope Mapping of Human T Cell Responses to Trypanosoma cruzi Cysteiny Proteinase, The Journal of Immunology, September 15, 1993, pp. 3171-79, Vol. 151, No. 6, USA.

REYNOLDS et al., T and B Cell Epitope Mapping of SM23, an Integral Membrane Protein of Schistosoma mansoni, The Journal of Immunology, December 15, 1992, pp. 3995-4001, Vol. 149, No. 12, USA.

KAWAKAMI et al., Identification of a human melanoma antigen recognized by tumor-infiltrating lymphocytes associated with in vivo tumor rejection, Proc. Natl. Acad. Sci, July 1994, pp. 6458-6462, Vol. 91, USA.

BAKKER et al., Melanocyte Lineage-specific Antigen gp100 Is Recognized by Melanoma-derived Tumor-infiltrating Lymphocytes, The Journal of Experimental Medicine, March 1994, pp. 1005-09, Vol. 179.

NCBI. Gen Bank. Accession No. M77348.

HUNT et al., Characterization of Peptides Bound to the Class I MHC Molecule HLA-A2.1 by Mass Spectrometry, Science, pp. 1261-63, Vol. 255.

SLINGLUFF et al., Recognition of Human Melanoma Cells by HLA-A2.1-Restricted Cytotoxic T Lymphocytes Is Mediated by at Least Six Shared Peptide Epitopes, The Journal of Immunology, April 1993, pp. 2955-63, Vol. 150, No. 7, USA.

ADEMA et al., Molecular Characterization of the Melanocyte Lineage-specific Antigen gp100, August 5, 1994, pp. 20126-33, Vol. 269, No. 31, USA.

KAWAKAMI et al., Immunobiology of Human Melanoma Antigens MART-1 and gp100 and their Use of Immuno-Gene Therapy, Intern. Rev. Immunol., pp. 173-92, Vol. 14, Overseas Publishers Association, Amsterdam, The Netherlands.

KAWAKAMI et al., Recognition of Multiple Epitopes in the Human Melanoma Antigen gp100 by Tumor-Infiltrating T Lymphocytes Associated with In Vivo Tumor Regression, The Journal of Immunology, 1995, pp. 3961-68, Vol. 154.

**Serial No.: 10/808,681**

This Supplemental Information Disclosure Statement is believed to be filed before the mailing date of a first Office Action on the merits; therefore, no fee is due.

Respectfully submitted,



Allen C. Turner  
Registration No. 33,041  
Attorney for Applicant(s)  
TRASKBRITT, P.C.  
P.O. Box 2550  
Salt Lake City, Utah 84110-2550  
Telephone: 801-532-1922

Date: January 30, 2006  
ACT/bv

Enclosures: Form PTO/SB/08  
Cited Documents  
Document in ProLaw



PTO/SB/08B(10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/808,681
				Filing Date	March 25, 2004
				First Named Inventor	Figdor et al.
				Group Art Unit	1642
				Examiner Name	To be assigned
Sheet	1	of	2	Attorney Docket Number	2578-4230.1US

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Notice of Opposition to a European Patent for Patent No. EP0668350, date of mention of the grant in the European Patent Bulletin July 28, 2004.	
		Opposition of EP0668350 in the name of Crucell Holland B.V. for Opponent Oxxon Therapeutics Limited.	
		ADEMA et al., Melanocyte Lineage-Specific Antigens Recognized by Monoclonal Antibodies NKI-beteb, HMB-50, and HMB-45 are Encoded by a Single cDNA, American Journal of Pathology, December 1993, pp. 1579-85, Vol. 143, No. 6.	
		VOGEL, EMBL Accession No. M32295	
		KWON et al., a melanocyte-specific gene, Pmel 17, maps near the silver coat color locus on mouse chromosome 10 and is in a syntenic region on human chromosome 12, Proc. Natl. Acad. Sci., October 1991, pp. 9228-32, Vol. 88, USA.	
		ADEMA et al., T-Cell Stimulatory Tumor Antigens, Keystone Symposium, 1993, J. Cell Biochem, supplement 17, part D, p. 107.	
		SHILYANSKY et al., T-cell receptor usage by melanoma-specific clonal and highly oligoclonal tumor-infiltrating lymphocyte lines, Proc. Natl. Acad. Sci., March 1994, pp. 2829-33, Vol. 91.	
		STORKUS et al., Identification of Human Melanoma Peptides Recognized by Class I Restricted Tumor Infiltrating T Lymphocytes, The Journal of Immunology, October 1, 1993, pp. 3719-27, Vol. 151, No. 7, USA.	
		O'NEIL et al., Detection of Shared MHC-Restricted Human Melanoma Antigens after Vaccinia Virus-Mediated Transduction of Genes Coding for HLA, August 1, 1993, pp. 1410-18, Vol. 151, USA.	
		KAWAKAMI et al., T-Cell Recognition of Human Melanoma Antigens, Journal of Immunotherapy, 1993, pp. 88-93, Vol. 14, Raven Press, Ltd., New York.	
		MILES et al., HiTech... Multiple Peptide Synthesis (Pepsan Method) for the Systematic Analysis of B- and T-cell Epitopes: Application to Parasite Proteins, Parasitology Today, 1989, Vol. 5, No. 12.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

2

**Complete if Known**

Application Number

10/808,681

Filing Date

March 25, 2004

First Named Inventor

Figdor et al.

Group Art Unit

1642

Examiner Name

To be assigned

Attorney Docket Number

2578-4230.1US

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ARNHOLDT et al., Analysis and Partial Epitope Mapping of Human T Cell Responses to Trypanosoma cruzi Cysteineyl Proteinase, The Journal of Immunology, September 15, 1993, pp. 3171-79, Vol. 151, No. 6, USA.	
		REYNOLDS et al., T and B Cell Epitope Mapping of SM23, an Integral Membrane Protein of Schistosoma mansoni, The Journal of Immunology, December 15, 1992, pp. 3995-4001, Vol. 149, No. 12, USA.	
		KAWAKAMI et al., Identification of a human melanoma antigen recognized by tumor-infiltrating lymphocytes associated with in vivo tumor rejection, Proc. Natl. Acad. Sci, July 1994, pp. 6458-6462, Vol. 91, USA.	
		BAKKER et al., Melanocyte Lineage-specific Antigen gp100 Is Recognized by Melanoma-derived Tumor-infiltrating Lymphocytes, The Journal of Experimental Medicine, March 1994, pp. 1005-09, Vol. 179.	
		NCBI. Gen Bank. Accession No. M77348.	
		HUNT et al., Characterization of Peptides Bound to the Class I MHC Molecule HLA-A2.1 by Mass Spectrometry, Science, pp. 1261-63, Vol. 255.	
		SLINGLUFF et al., Recognition of Human Melanoma Cells by HLA-A2.1-Restricted Cytotoxic T Lymphocytes Is Mediated by at Least Six Shared Peptide Epitopes, The Journal of Immunology, April 1993, pp. 2955-63, Vol. 150, No. 7, USA.	
		ADEMA et al., Molecular Characterization of the Melanocyte Lineage-specific Antigen gp100, August 5, 1994, pp. 20126-33, Vol. 269, No. 31, USA.	
		KAWAKAMI et al., Immunobiology of Human Melanoma Antigens MART-1 and gp100 and their Use of Immuno-Gene Therapy, Intern. Rev. Immunol., pp. 173-92, Vol. 14, Overseas Publishers Association, Amsterdam, The Netherlands.	
		KAWAKAMI et al., Recognition of Multiple Epitopes in the Human Melanoma Antigen gp100 by Tumor-Infiltrating T Lymphocytes Associated with In Vivo Tumor Regression, The Journal of Immunology, 1995, pp. 3961-68, Vol. 154.	

Examiner  
Signature

Date

Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.